

**BEST AVAILABLE COPY****Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the Application.

**Listing of Claims:**

1. (PREVIOUSLY PRESENTED) An authentication object, the authentication object for use in a transaction, the transaction being authenticated at least in part via an authentication network, and at least one data packet having an itinerary in the authentication network, the itinerary being pre-determined in the at least one data packet, the authentication object comprising a predictor, the predictor enabled to predict at least a part of the pre-determined itinerary of the at least one data packet in the authentication network.
2. (CURRENTLY AMENDED) The authentication object of claim 1, wherein the predictor is implemented as logic circuitry that generates a prediction of at least one or both of (i) the node that the at least one data packet occupies and (ii) the next node that the at least one data packet will occupy.
3. (PREVIOUSLY PRESENTED) A method of determining authenticity of an authentication object, the authentication object being for use in a transaction, the transaction being authenticated at least in part via an authentication network comprising plural nodes, and at least one data packet having an itinerary in the authentication network, the itinerary being pre-determined in the at least one data packet, the method comprising: receiving from the authentication object a prediction of at least a part of the pre-determined itinerary of the at least one data packet in the authentication network; and verifying the prediction.

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4. (CURRENTLY AMENDED) The method of claim 3, wherein receiving a prediction comprises receiving a prediction as to at least one or both of (i) the node that the data packet occupies and (ii) the node that is the data packet's next destination.
5. (CURRENTLY AMENDED) The authentication object of claim 1, wherein the predictor is implemented as a look up table that contains, related to a time parameter, at least one or both of (i) the node that the at least one data packet occupies and (ii) the next node that the at least one data packet will occupy.
6. (PREVIOUSLY PRESENTED) The method of claim 3, wherein verifying the prediction comprises comparing the prediction against at least a part of the actual itinerary of the at least one data packet.
7. (CURRENTLY AMENDED) The method of claim 3, wherein verifying the prediction comprises comparing the prediction against at least one or both of (i) the node that the at least one data packet occupies and (ii) the next node that the at least one data packet will occupy.
8. (PREVIOUSLY PRESENTED) The method of claim 3, further comprising exercising the at least one data packet's itinerary.
9. (PREVIOUSLY PRESENTED) The method of claim 8, wherein exercising comprises having the at least one data packet occupy a pre-determined node of the authentication network at a particular time.

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10. (PREVIOUSLY PRESENTED) The method of claim 8, wherein exercising further comprises, after a transaction, having the at least one data packet occupy a pre-determined node of the authentication network for use in authenticating a subsequent transaction.
11. (PREVIOUSLY PRESENTED) The method of claim 3, further comprising establishing an itinerary for the at least one data packet.

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12. (PREVIOUSLY PRESENTED) The method of claim 11, wherein establishing an itinerary for the at least one data packet comprises programming the at least one data packet.
13. (PREVIOUSLY PRESENTED) The method of claim 11, wherein establishing an itinerary for the at least one data packet comprises calculating an itinerary, mapping the calculated itinerary onto one or more instructions and storing the one or more instructions in the at least one data packet.
14. (PREVIOUSLY PRESENTED) The method of claim 3, further comprising receiving from the authentication object a prediction of at least a part of a pre-determined itinerary of a second data packet in an authentication network; and verifying the prediction.
15. (PREVIOUSLY PRESENTED) The method of claim 14, wherein receiving and verifying as to a second data packet comprises receiving and verifying responsive to the transaction.
16. (PREVIOUSLY PRESENTED) The method of claim 14, wherein receiving and verifying as to a second data comprises receiving and verifying responsive to a transaction subsequent to the transaction.
17. (PREVIOUSLY PRESENTED) The method of claim 14, wherein receiving and verifying as to a second data packet comprises receiving and verifying using a second authentication network.

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18. (PREVIOUSLY PRESENTED) The method of claim 3, further comprising keeping a prediction valid for a selected time frame.
19. (PREVIOUSLY PRESENTED) The method of claim 18, further comprising rejecting authentication based on receipt, within the selected time frame, of a second prediction as to the at least one data packet.

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20. (PREVIOUSLY PRESENTED) The method of claim 19, wherein rejecting authentication comprises requesting another prediction as to the at least one data packet's itinerary.